

REMARKS

In the final Office Action, the Examiner objected to claim 1 for containing informalities. Applicants have amended claim 1 in the Amendment filed on February 6, 2004—as suggested by the Examiner—and request the Examiner withdraw this objection.

Further, the Examiner rejected claims 1, 2, 5-8, 11, 12, and 14-20 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,135,809 to Asakawa (“Asakawa”) and rejected claims 3, 4, 9, 10, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Asakawa in view of U.S. Patent No 6,231,360 to Horie (“Horie”).

With regard to the § 102(e) and § 103(a) rejections, the Examiner stated:

“Asakawa discloses a card connector comprising: a pair of guide grooves (see following figure) formed on both sidewalls of a connector housing (2); and sidewalls (see following fig.) to define, below a space between the pair of guide grooves, and a base plate with a plurality of contact terminals arranged in the base plate to couple with contact of a bottom surface of a card. Please note that recitations of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.”

Final Office Action, pages 2 and 3. Applicants respectfully request that the Examiner withdraw the rejections because the card connector 1 of Asakawa is not configured to accommodate the first card, as recited in amended claims 1 and 11.

A significant aspect of the present invention, as disclosed on page 6, lines 2-9 of the specification, is to maintain a same contact pressure between a connector contact and card pads when inserting two kinds of cards with different thicknesses.

Further, as described in the specification and depicted in Figs. 12 and 13, the present invention is featured in that:

“In the connector structure above, because the braking piece 7 is so arranged that it presses, from below, against equal-thickness portions of the two different-thickness cards 10, 20, the braking piece 7 is displaced by the same distance, whichever of the two cards 10, 20 is inserted. This means that the contact pressures produced by the braking piece 7 engaging the card 10 and the card 20 are virtually equal. Therefore, when the card is ejected by the eject mechanism, the frictional resistances applied by the elastic force of the braking piece 7 to the two cards 10, 20 are equal, thus assuring stable ejection operations for the two cards.”

Specification, page 24, lines 5-17.

In Asakawa, a card connector is not configured to receive two different kinds of cards having different thicknesses. As pointed out by the Examiner, although Fig. 2 of Asakawa illustrates a space below a space that is defined between a pair of guide grooves, this space is not designed to receive cards having various thicknesses. The space is a mere result of the design of the card connector (for example, it was designed for minimizing resistance caused by inserting or ejecting a card, or required in the process of manufacturing housing). In Asakawa, as shown in Fig. 6, card C' passes through slot 4' when it is thick, and as shown in Fig. 5A, a thin card C passes through slot 4 having different height from slot 4'.

In short, Asakawa teaches that sensing members 52 and 54, which constitute detecting unit 50, can only be employed for thin cards or thick cards.

The Examiner seems to consider that the space below the space between the pair of guide grooves of Asakawa can render a same function as recited in the present invention, i.e., accommodating a lower body portion of a card. However, as explained above, there is a difference in structure between the space of Asakawa and that of the present invention.

According to the present invention, when inserting a first card, which has a configuration recited in claim 1 or 11, into the card connector according to the present invention, an upper body portion of the first card is received into a space defined between a pair of guiding grooves. Additionally, the lower body portion of the first card is received in a space below the space defined between the pair of guiding grooves within a connector housing. Further, when inserting a second card having a conventional configuration into the card connector according to the present invention, the second card is received in the space defined between the pair of guiding grooves.

In Asakawa, it is not possible to resolve the problem of the prior art and to apply the same contact pressure onto the cards having various thicknesses.

Further, although contacts 20, 50 of Asakawa can serve as braking pieces, the contacts can not serve as the braking pieces recited in the claims.

Additionally, Horie fails to overcome the above-noted deficiencies of Asakawa and is not relied upon for such teaching.

With respect to new claims 21-30, Applicants submit that these new claims are also patentable over the cited art. In addition to the reasons discussed above, the cited references do not teach or suggest, a card connector characterized by a first space and second space, "wherein said first space is unobstructed across the width of said lower body portion of the entire length of said first space," as recited in the new claims.

For these reasons, Applicants submit that the §§ 102(e) and 103(a) rejections should be withdrawn.

Conclusion

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-30 in condition for allowance.

Applicants respectfully request the timely allowance of the pending claims.

The Examiner is invited to call the undersigned at (202) 408-4157 if the Examiner deems that a telephone conversation would further the prosecution of the application.

Please grant any extension of time needed to enter this reply and charge any needed fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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